Marine Mammal Behavioral Disturbance Working Group Perot Systems, Scituate, MA 9:00 AM - 4:00 PM 9 December 2003

Meeting Summary

SUMMARY OF ACTION ITEMS

ACTION: Determine if there is a publication for aircraft pilots similar to Coast Pilot for Boaters. If there is such a thing SBNMS boundary should be included and right whale regulations denoted.

ACTION: Ask FAA to include within its regulations the 500 yard approach limit for right whales.

ACTION: Assess whether the FAA would be willing to make regulations about approaching marine mammals. Change regulations to include marine mammals along with persons, structures, and vessels in the 500-foot minimum altitude rule. Joe Green agreed to look into this. NOAA should approach the FAA to amend section 91.119 (c) to delete "or" following vehicle and insert "and marine mammals except where more restrictive regulations prevail".

ACTION: SBNMS should work with Fish and Wildlife Service to assess marine bird bycatch. Fishing vessel logbook reports should add birds to by catch list, and extrapolate for effort.

ACTION: Joe Green will supply the working group with patrol information such as: cost and number of patrols.

ACTION: Carole Carlson will compile international regulations regarding, overflight, circling, and landing.

ACTION: Nathalie Ward will accept FAA related questions from the working group until November 12 and then she will seek answers to those questions by contacting an FAA official. She will report the answers at the next meeting.

ACTION: Determine feasibility of meeting at the same time as the vessel strike working group.

ACTION: Nathalie Ward will give a presentation using GIS to display closed area and seasonal fishing usage.

ACTION: Carole Carlson will provide pop-up buoy information

ACTION: Peter Sheifel will present at the 22 January meeting on acoustics

ACTION: Regina Asmutis will write a short history of whale watching in SBNMS as an introductory paragraph to action plan.

ACTION: Nathalie Ward will determine if SBNMS regulations prohibit collecting user fees. May be possible to channel fees through the National Wildlife Service Foundation.

MMBD WORKING GROUP MEMBERS PRESENT

Dave Slocum Whale watching

Sharon Young Conservation
Carole Carolson Conservation
Dana Hartly NMFS-NESC

NMFS-NESC

Kim Amaral Academic Peter Scheifel Academic

NOT PRESENT

Scott MacNeil Shipping

Jack Kent Recreational Boating

Henry MacCarthy Tuna Fishing

Others Present

INTRODUCTION/OLD BUSINESS

Working Group (WG) members updated their contact information. Nathalie Ward distributed the 9 December Agenda and the Action Items from the previous meeting. Motion was made to accept the Minutes from the 16 November meeting and adopt the current Agenda. Ward announced MMBD Minutes and Agendas would be posted on the Stellwagen Bank National Marine Sanctuary (SBNMS) website.

WG members reviewed the goal statement drafted at the previous meeting, wordsmithed by Ward, that emphasized the dual goal of resource protection and compatible use, and was approved by the WG as follows:

"The goal of the Working Group is to devise a framework to assess and minimize behavioral disturbance to marine mammals, and to foster cooperation with cross jurisdictional partners which affect those living resources."

PRESENTATION by Technical Advisor Joe Green, Enforcement Coordinator SBNMS

The Sanctuary has an MOU with the Massachusetts Environmental Police (MEP). MEP are cross-deputized as a Federal authority to enforce the MMPA/ESA/Sanctuary Act. Enforcement within the Sanctuary is also available from the CG/NMFS/USFWS. Currently, SBNMS is also partnering with the U. S. Fish and Wildlife Service to enforce the Migratory Bird Act. The Sanctuary is also encouraging the Coast Guard to also increase its patrols and enforce regulations within the sanctuary.

To enforce the MMPA, SBNMS must prove "harassment," meaning that the animal's activity must be documented before, during, and after the harassment, a difficult exercise. Right

whale harassment is easier to prove since violators are people who are closer than 500 yards from the animal. Enforcement would be easier if all marine mammals had a minimum approach regulation. On the West Coast, violators of minimum approach regulations have been successfully cited and the citation upheld in court.

Disturbance of marine mammals by aircraft seem to be a growing problem, but no pilots have been cited. FAA regulations prevent pilots from going lower than 500 feet in the vicinity of buildings and structures, but not marine mammals. Pilots should be aware that the 500 yard radius around right whales prevents them from approaching within 500 yards in the air.

ACTION: Determine if there is a publication for aircraft pilots similar to Coast Pilot for Boaters. If there is such a thing SBNMS boundary should be included and right whale regulations denoted.

ACTION: Ask FAA to include within its regulations the 500 yard approach limit for right whales.

ACTION: Assess whether the FAA would be willing to make regulations about approaching marine mammals. Change regulations to include marine mammals along with persons, structures, and vessels in the 500 foot minimum altitude rule. Joe Green agreed to look into this.

Across the country there are a variety of regulations about approaching marine mammals. The East Coast, Hawaii, and Alaska have different regulations and guidelines applicable to different species.

During the past summer Coast Guard Auxiliary observers openly documented interactions of commercial whale watching boats and private whale watching boats with marine mammals. Documentation was carried out by observational field notes, video, and still photography. The observers were not in the position to enforce regulations or determine accurately how far vessels were from whales. This effort was one of the ways that SBNMS was trying to get other organizations involved. SBNMS should also be attempting to inform recreational boaters about regulations by making announcements on VHF CH. 16 and in the Boston Globe.

ACTION: SBNMS should work with Fish and Wildlife Service to assess marine bird bycatch. Fishing vessel logbook reports should add birds to by catch list, and extrapolate for effort.

The WG identified several other potential disturbance sources:

- Tuna spotter planes
- Aerial whale watching
- Blimps/Airships which are currently exempt from minimum FAA altitude regulations
- FAA treats helicopters differently from aircraft, therefore special wording is necessary for future guidelines or regulations

ACTION: Joe Green will supply the working group with patrol information such as: cost and number of patrols.

Final thought: SBNMS in now on the Massachusetts Environmental Police radar screen.

PRESENTATION by Technical Advisor Dave Wiley, Research Coordinator SBNMS

Airships are capable of traveling very low to the water ~50 meters in altitude and are very loud on the ground. SBNMS habitat use survey conducted 15 east-west tracklines monthly, from July 2001 to June 2002 to track animals, boats and fishing gear. Albeit expensive research, SBNMS would like to repeat on at least three year cycles. The data will allow the comparison of whale locations to commercial and recreational fishing. Research has shown that vessels are not transiting SBNMS on the three designated shipping channels. Humpback and right whale locations were plotted on a GIS against vessels paths to determine if there are safer corridors for vessels to use.

Research conducted by Wiley (SBNMS) in summer 2004 used a Fuji airship to observe marine mammals before and after a vessel passed. Unfortunately, no ships were successfully tracked during the project. Researchers noted one opportunistic sighting in the Great South Channel, in which one ship was heading north. The results indicated that whale behavior may have changed when the ship passed. More whales came to were seen at the surface when the ship passed. However, the sample size (n=1) is small, the speed of the blimp was inconsistent (30 knotsts going south and 15 kts heading north), and tides and prey data were not taken into consideration. Therefore, these data are preliminary information upon which a future pilot study may be based.

Wiley and SBNMS also tagged one whales (a yearling) with a DTAG to record the animal's behavior over a short duration. The tag recorded many parameters including vessels noise, fluke strokes, and the position and attitude depth of the whale. One of the difficulties with using DTAGS is that you must create a pseudo-track from heading and estimate velocity (need to figure out how to know the real velocity of the whale). The sample size was very low for this project (n=1). Although the vessel was fairly audible, the whale didn't' show much reaction.

Items for future research:

- Need more fine-scaled research to determine the amount of boats around whales on daily basis
- Do animals react to the shadow of a blimp or a plane?
 - One observation (by Carole Carlson) indicated that when the airship shadow went over the whale, the whale tail slashed. There was a question as to whether this was caused by the shadow or a tactile sensation due to airflow? The WG suggested one check with Jim Hain, who has also observed whales from blimps; someone believes he feels that whales react to shadows.
- How is sound generated from a moving vessel travels experienced by a marine mammal?
 Peter Sheifel noted that he has sound signatures from different boats, one water jet engine signature, mostly props.
- Need a control for vessel speed

How does sound propagate from different types of boats and engines?

 Upcoming SBNMS projects: 2 weeks on a NOAA boat @ end of June to use tags from Tyack

EXAMINES REFERNCE DOCUMENTS: ACTION PLAN OUTLINE

The WG reviewed:

- 1) Regulations/Guidelines at other Sanctuaries
- 2) Overflight Harassment Action Plan drafted by Ward

 $ACTION: \ \,$ Carole Carlson will compile international regulations regarding, overflight, circling, and landing.

DRAFT OVERFLIGHT ACTION PLAN (See Appendix I)

LUNCH

FUTURE BUSINESS

Meeting dates: 27 April 2004 and 2 March 2004

Technical Advisor for 22 January 2004: Pat Gerrior MSR tracks

ACTION: Determine feasibility of meeting at the same time as the vessel strike WG.

ACTION: Nathalie Ward will give a presentation using GIS to display closed area and seasonal fishing usage.

ACTION: Carole Carlson will provide pop-up buoy information.

ACTION: Peter Sheifel will present an overview on acoustics at the 22 January MMBD

DRAFTING THE WHALE WATCH APPROACH ACTION PLAN

WG members felt that the existing guidelines need an enforcement plan. Non-commercial private boaters are a much larger problem than whale watching companies, but regulations are aimed at commercial whale watch boats. The group felt that any vessel within a specific range of a whale that stops is considered a whale watching vessel for the group's definition. Education has not prevented private boaters from disregarding guidelines. Lots of education activity has gone into getting the word out to boaters but it is not working. Lack of enforcement seems to be the issue. When boaters see an enforcement vessel they pull back from the whale.

DRAFT: WHALE WATCH APPROACH ACTION PLAN (See Appendix II)

PUBLIC SCOPING COMMENTS: REVIEW

Nathalie Ward recorded the public scoping comments that the WG did not think were relevant, accurate or applicable. Responses initiated a discussion about whether SBNMS can charge "user fees."

ACTION: Nathalie Ward will determine if SBNMS regulations prohibit collecting user fees. It m,ay be possible to channel fees through the National Wildlife Service Foundation.

CONCLUSIONS

WG reviewed action items generated during this meeting.

APPENDIX I

DRAFT OVERFLIGHT ACTION PLAN

Strategy OV-1 Develop Outreach Guidelines

Activities:

- 1.1 Work with pilot associations to include SBNMS notation and guidelines on aeronautical charts and information materials.
- 1.2 Work with cross-jurisdictional enforcement agencies to monitor and enforce overflight guidelines.

Strategy OV-2: Develop Overflight Guidelines

Activities:

- 2.1 SBNMS should approach the FAA to change FAA regs. 91.119 (c) to delete the word "or" following the word vehicle and insert "and marine mammals, except where more restrictive regulations prevail."
- 2.2a Create Sanctuary guidelines that govern the operation of airplanes, helicopters, airships,

and other aircraft in the presence of marine mammals to state:

Helicopters, airships, and other aircraft should not be operated lower than an altitude of 1500 feet in SBNMS, excepting where scientific research permits are granted by NMFS. *Majority Opinion* [are we sticking with this? Or are we going with 1000' since that it is what the ww guidelines currently say??]

2.2b While the need of overflight guidelines is acknowledged, the actual guidelines cannot be determined without further research. *Minority Opinion*

To be resolved: Tuna Spotter Planes, Dedicated Whale Watching Planes DOD definition of harassment excluded military and "government" research. WG posed the following: How broad is government research? Is it any research that gets government funding??

Strategy OV-3: Identify Information Gaps

Activities:

- 3.1 Produce descriptive database to determine overflight use including helicopters, blimps and aircraft.
- 3.2 Impact of Noise, Visual, and Tactile parameters.

The group was divided upon what the actual minimum height or radius numbers should be. Seems to be a lack of data to support established minimums. The group was also concerned about research permit holders and whether SBNMS should be part of the permitting process or should simply be notified.

ACTION: Nathalie Ward will accept FAA related questions from the working group until December 12 and then she will seek answers to those questions by contacting an FAA official. She will report the answers at the next meeting.

APPENDIX II

DRAFT WHALE WATCH APPROACH ACTION PLAN

Strategy WW-1: Development of regulations governing the operation of vessels in the vicinity of whales, porpoises, and dolphins.

Activities:

- 1.1 SBNMS should draft regulations for all vessels based on existing NMFS guidelines.
- 1.2 Recommend to NMFS that its existing guidelines become regulations applicable to all vessels in the vicinity of whales (with existing exceptions applicable for fishing vessels towing gear or investigating entanglements). Use the Coast Guard definition of vessel to assure inclusion of personal watercraft and kayaks. [CG Rule 3 (a) states: the word "vessel" includes every description of water craft, including nondisplacement craft and seaplanes, used or capable of being used as a means of transportation on water."
- 1.3 Consider restrictions on the use of personal watercraft and/or kayakers.
- 1.4 Future management actions may consider a stringent certification program based on New Zealand's program.
- 1.5 Investigate certification program for vessel operators that would allow certified operators to approach whales more closely than non-certified operators.

Strategy WW-2: Enforcement

Activities:

- 2.1 Sanctuary enforcement presence on the Bank
- 2.2 Seek funding for dedicated vessel and staff to enforce Sanctuary regulations.
- 2.3 Distribute warning tickets to vessels violating whale watching guidelines/regulations.

Strategy WW-3: Outreach/Education

Activities:

- 3.1 Distribute information detailing penalties for violating regs/guidelines.
- 3.2 Investigate the feasibility of a certification programs for whale watching captains.
- 3.3 Develop a biennial or annual conference to which educators and naturalists are invited to learn about SBNMS resources, research, conservation, and regs. Providing PDPs and education materials to be used in classrooms, whale watch vessels, and in continuing education units.

Strategy WW-4:Research

Activities:

- 4.1 Keep track of how many commercial whale watch vessels are using the Sanctuary to track trends in commercial whale watch activity over time. Additionally, continue trackline survey studies to monitor distribution of whales and vessels in the sanctuary spatially and temporally.
- 4.2 Whale tagging program to determine short term and cumulative impacts on whales.

- 4.3 Establish a baseline for cumulative impact studies.
- 4.4 Baseline sampling to establish ambient noise levels within and outside the sanctuary.
- 4.5 Encourage species recognition and individual ID studies which provide an opportunity to determine long term impacts.
- 4.6 Identify and where appropriate initiate partnerships with various entities conducting acoustic research.
- 4.7 Develop a mechanism to model cumulative acoustic impacts (eg. Depth finder, vessel types and speed)

Considerable discussion focused on whether certification is an enforcement issues or an outreach issue. General agreement that it would best fit as an outreach issue since it will be very difficult to get certification amended onto a vessel captains license as administered by the Coast Guard.

ACTION: Regina Asmutis will write a short history of whale watching in SBNMS as an introductory paragraph to action plan.

AGENDA